

ABSTRACT

An optical head device includes a first laser light source that emits a first laser beam with a first wavelength, a second laser light source that emits a second laser beam with a second wavelength which is different from that of the first laser beam, a common objective lens that converges the first laser beam on a recording surface of a first optical recording medium and the second laser beam on a recording surface of a second optical recording medium, a refraction surface that is formed on the common objective lens so as to be divided into a center side refraction surface region around an optical axis of the common objective lens and an outer peripheral side refraction surface region surrounding the center side refraction surface region and a center side diffraction grating that is formed all over the center side refraction surface region and is provided with a number of minute steps in a concentrically circular shape. A step height of the minute steps of a prescribed portion including a most inner side minute step of the center side diffraction grating is set to correspond to the first wavelength of the first laser beam, and a step height of remaining minute steps of the center side diffraction grating is set to correspond to the second wavelength of the second laser beam, and the outer peripheral side refraction surface region of the common objective lens is formed to have a refracting power corresponding to the second laser beam.